

WHAT IS CLAIMED IS:

1. A method for forming conducting wires in a semiconductor device, comprising steps of:
 - 5 providing a substrate;
 - forming a first dielectric layer on said substrate;
 - digging a via in said first dielectric layer and filling said via with metal;
 - forming a conductor layer on said first dielectric layer including said via;
 - forming a metal layer on said conductor layer;
- 10 forming photoresist of a predetermined pattern on said metal layer;
- removing portions of said conductor layer and metal layer not covered with said photoresist to form the conducting wire; and
- removing said photoresist.
2. The method as recited in Claim 1, wherein the material of said metal layer is different from that of the conductor layer.
- 15 3. The method as recited in Claim 2, wherein the material of said metal layer is tungsten.
4. The method as recited in Claim 1, wherein said conductor layer has an another metal layer and barrier layers formed on the top and bottom surfaces of said another metal layer.
- 20 5. The method as recited in Claim 4, wherein the material of said another metal layer of the conductor layer is aluminum.
6. The method as recited in Claim 4, wherein the material of the barrier layers is Ti/TiN.
7. A method for forming conducting wires and contact openings in a semiconductor device, comprising steps of:
 - 25 providing a substrate;
 - forming a first dielectric layer on said substrate;
 - digging a via in said first dielectric layer and filling said via with metal;
 - forming a conductor layer on said first dielectric layer including said via;
 - forming a metal layer on said conductor layer;

forming photoresist of a predetermined pattern on said metal layer;
removing portions of said conductor layer and said metal layer not covered with the photoresist to form recesses, leaving the remained portion as the conducting wire;
removing said photoresist;

5 coating a second dielectric layer to fill said recesses and performing planarization to expose said conducting wire;

 forming a third dielectric layer on said second dielectric layer and said conducting wire;

 forming photoresist of a predetermined pattern on said third dielectric layer;

 removing portions of said third dielectric not covered with the photoresist to form the

10 contact opening; and
 removing the photoresist.

8. The method as recited in Claim 7, wherein the material of said metal layer is different from that of the conductor layer.

9. The method as recited in Claim 8, wherein the material of said metal layer is tungsten.

15 10. The method as recited in Claim 7, wherein said conductor layer has an another metal layer and barrier layers formed on the top and bottom surfaces of said another metal layer.

11. The method as recited in Claim 10, wherein the material of said another metal layer of the conductor layer is aluminum.

20 12. The method as recited in Claim 10, wherein the material of the barrier layers is Ti/TiN.